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VISIBILITY LABORATORY
SCRIPPS INSTITUTION OF OCEANOGRAPHY

SAN DIEGO, CALIFORNIA 92152

VisLab File No. 003

To: Commander
Navy Ship Systems Command
Attn: Code 03522

Subj: NASA Interagency Fund Transfer R-139; Visibility Laboratory activities under Contract NObs-92058 for June 1966 on the development for NASA of computer techniques for performing visibility calculations

The lunar landmark study has been completed, and the detailed results have been delivered to Ames Research Center. The results are in the form of curves which give a detectability index (relative values) for each of the landmarks as a function of the magnification used in the observation. A similar graph was made for each lunar phase. A set of dry-mounted prints of the lunar photographs was made with magnifications adjusted so that when viewed at two-feet viewing distance, the prints corresponded to viewing with magnifications of 1X, 5X, 10X, 15X, 20X, and 30X. A set of six prints was made for each lunar phase. These prints allow a rough estimate of magnification requirements to be made visually, and the prints serve primarily as a means of generating intuitive understanding of the magnification requirements.

The crater project vision research has continued throughout June. The case of a target 5 minutes of arc from the center of the crater has been added to the experiment, and the data for this case is nearly complete.

The basic contrast threshold experiments have continued. In addition to the 2° targets previously reported, 1° targets have been studied centrally and at eight azimuths 12° from center. To date more than 116,700 observations have been completed, for the photopic case (B = 100 ft L.).

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(ACCESSION NUMBER)

2

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(CODE)

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R. W. Duntley for

S. Q. Duntley

Director

Visibility Laboratory

To: Commander
Navy Ship Systems Command

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-2-

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